

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

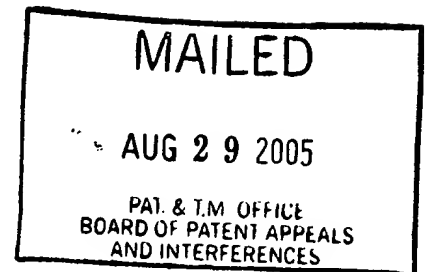
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DAVID A. DALMAN, CHARLES P. WEBER JR.
And GREGORY J. La CASSE

Appeal No. 2005-1178
Application 09/880,834

HEARD: August 10, 2005



Before WALTZ, KRATZ, and PAWLIKOWSKI, **Administrative Patent Judges.**

WALTZ, **Administrative Patent Judge.**

DECISION ON APPEAL

This is a decision on an appeal from the primary examiner's final rejection of claims 1 through 15, which are the only claims pending in this application. We have jurisdiction pursuant to 35 U.S.C. § 134.

According to appellants, the invention is directed to a ballistic-resistant fabric or clothing article made of polybenzoxazole (PBO) polymer fibers that are untwisted and have a fiber fineness of no more than 500 denier (Brief, page 2). Appellants state that the claims in each rejection on appeal stand or fall together (Brief, page 2).¹ Accordingly, we select claims 1 and 11, respectively, from the two rejections on appeal and limit our consideration to these claims alone. See 37 CFR § 1.192(c)(7)(2003); *In re McDaniel*, 293 F.3d 1379, 1383, 63 USPQ2d 1462, 1465 (Fed. Cir. 2002). Representative independent claim 1 is reproduced below:

1. A fabric or clothing article made of a plurality of polybenzoxazole polymer fibers, wherein said article has ballistic resistance suitable for use as soft armor and the fibers are untwisted and are of no more than 500 denier.

The examiner relies upon the following references as evidence of unpatentability:

Dunbar et al. (Dunbar)	5,119,512	Jun. 09, 1992
Weber et al. (Weber)	5,233,821	Aug. 10, 1993

Claims 1-10 and 13-15 stand rejected under 35 U.S.C. § 102(e) as anticipated by Weber (Answer, page 2). Claims 11 and 12 stand rejected under 35 U.S.C. § 103(a) as unpatentable over

¹The examiner states that appellants aver that claims 1-15 do not stand or fall together and provides reasons therefore (Answer, page 2, ¶ (7)). This is correct insofar as appellants argue the rejections separately, although the claims in each rejection stand or fall together.

Weber in view of Dunbar (Answer, page 3).² Based on the totality of the record, including the opposing arguments of appellants in the Brief and Reply Brief and the examiner in the Answer, we *affirm* all of the examiner's rejections on appeal essentially for the reasons stated in the Answer, as well as those reasons set forth below.

OPINION

A. The Rejection under § 102(e)

The examiner finds that Weber discloses fabrics containing polybenzazole fibers, formed into yarns where the filaments may be held together by twisting, entangling or by the application of a finish (Answer, paragraph bridging pages 2-3). Therefore the examiner finds that Weber teaches untwisted fibers, as well as disclosing the optimum denier of the yarn may be at least 50 denier, more preferably at least about 200 denier (Answer, page

²There are many informalities present in the claims on appeal that should be addressed by the examiner and appellants in the event of further or continuing prosecution. It appears that claims 13 and 15 are duplicates. Claim 11 recites "PBO" but there is no antecedent basis for this abbreviation. In claims 5, 8 and 9, the terminology lacks antecedent basis since claim 1 recites "polybenzoxazole" while these claims depend on claim 1 but recite a "polybenzazole." We also note that claim 2 recites "polybenzoxazole" but both polybenzoxazoles and polybenzthiazoles are included in the claimed formula (Z is oxygen or sulfur). The claim language should be consistent, i.e., polybenzazole is generic to both oxazoles and thiazoles, while oxazoles are compounds with oxygen-containing five-membered nitrogen rings and thiazoles are compounds with sulfur-containing five-membered nitrogen rings.

3). From these findings, the examiner states that the subject matter of claim 1 on appeal is anticipated by the disclosure of Weber (*id.*). We agree.

Appellants argue that Weber discloses only cut resistant articles, and the difference between the requirements of a ballistic resistant article and a cut resistant article is shown by the difference in fiber denier and fiber twisting used by appellants and Weber (Brief, page 3, citing the Declaration of Mr. Nomura). Appellants further argue that Weber does not specifically teach untwisted fibers, and all examples in Weber are directed to twisted yarns with deniers well over 500 (Brief, page 4; Reply Brief, page 3).

These arguments are not well taken. As correctly argued by the examiner (Answer, page 4), Weber clearly describes, within the meaning of section 102, untwisted PBO fibers with deniers of less than 500. Weber discloses (col. 5, ll. 16-18) "[c]ontinuous filament yarn . . . are held together by known means, such as twisting, entanglement or application of a finish." Thus Weber implicitly discloses that the yarn is "untwisted" when held together by entanglement or application of a finish. Weber further discloses that the optimum denier of the yarn varies depending on the use and price but for most purposes is preferably at least about 50 denier (col. 5, ll. 22-24).

Regarding the examples of Weber, we note that a reference is not limited to its examples but is available for all that it discloses and suggests. See *In re Widmer*, 353 F.2d 752, 757, 147 USPQ 518, 523 (CCPA 1965) (we also note that appellants' only example teaches a twisted yarn; specification, page 14, l. 18). Finally, we note that a Declaration under 37 CFR § 1.132, such as the Nomura Declaration dated Dec. 4, 2004, alleging unexpected results, cannot overcome a proper rejection based on section 102 of the statute. See *In re Malagari*, 499 F.2d 1297, 1302, 182 USPQ 549, 553 (CCPA 1974).

Appellants argue that the examiner does not seem to give any "patentable weight" to the limitation "ballistic resistance suitable for soft armor" (Reply Brief, page 2). Appellants argue that "ballistic resistance suitable for soft armor" is not a statement of intended use but rather is a description of a physical property of the claimed fabric or clothing article (*id.*). Appellants further argue that a ballistic resistant article that is suitable for soft armor has "strength and other properties" such that it will withstand the impact of high velocity projectiles (*id.*).

Appellants' arguments are not persuasive. As stated by a predecessor of our reviewing court, where the examiner has reason to believe that a functional limitation asserted to be critical

for establishing novelty in the claimed subject matter may, in fact, be an inherent characteristic of the prior art, the applicant is required to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on. See *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977); see also *In re Spada*, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990). The fairness of shifting the burden is evidenced by the Office's inability to manufacture products or to obtain and compare prior art products. See *In re Best*, 562 F.2d at 1255, 195 USPQ at 433-34.

We determine that the examiner has established a reasonable belief that the products of Weber and the claimed products are the same. The examiner has found that Weber describes fabric or a clothing article (e.g., col. 6, ll. 55-68) made of a plurality of polybenzoxazole fibers (e.g., col. 1, ll. 38-41) where the fibers are untwisted (col. 5, ll. 16-18) and of no more than 500 denier (col. 5, ll. 22-30). Weber teaches that the average tensile strength of the fiber is preferably at least about 1 GPa, most preferably at least about 4.10 GPa (col. 4, l. 68-col. 5, l. 4), while appellants teach the identical fiber strengths (specification, page 9, ll. 29-33). Appellants have not pointed to any other properties of their PBO fibers that would distinguish over the PBO fibers of Weber. Appellants have not

pointed to any definition or guidelines in the specification or the prior art to establish the meaning of "ballistic resistance," what resistance is "suitable" for soft armor, or any standards encompassed by the term "soft armor." The only ballistic testing in the specification describes testing for "hard armor" (specification, page 14, l. 26-page 15, l. 10). Furthermore, this testing is done for "twisted" PBO fibers with an average denier of about 450 to about 750 denier, which are fibers outside of the scope of claim 1 on appeal (specification, page 14, ll. 1-25). Therefore the record is devoid of what degree of ballistic resistance is necessary to be "suitable" for soft armor, and we determine that the examiner has established a reasonable belief that the product of Weber possesses the same properties and characteristics as the claimed product.

For the foregoing reasons and those stated in the Answer, we determine that the examiner has established a *prima facie* case of anticipation which has not been adequately rebutted by appellants' arguments. Therefore we affirm the examiner's rejection of claims 1-10 and 13-15 under section 102(e) over Weber.

B. The Rejection under § 103(a)

Regarding the rejection of claims 11 and 12 under section 103(a), the examiner presents the finding of facts and conclusion of law on pages 3-4 of the Answer. Appellants present no arguments specific to this rejection other than to repeat their arguments against Weber (Brief, page 5). Accordingly, for the reasons discussed above and in the Answer, we adopt the examiner's findings of fact and conclusion of law. Therefore we affirm the examiner's rejection of claims 11 and 12 under section 103(a) over Weber in view of Dunbar.

C. Summary

The rejection of claims 1-10 and 13-15 under 35 U.S.C. § 102(e) over Weber is affirmed. The rejection of claims 11 and 12 under 35 U.S.C. § 103(a) over Weber in view of Dunbar is also affirmed.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv)(2004).

AFFIRMED

THOMAS A. WALTZ

THOMAS A. WALTZ
Administrative Patent Judge

Pete F. Kaul

PETER F. KRATZ
Administrative Patent Judge

Beverly A. Cawthorne

BEVERLY A. PAWLIKOWSKI
Administrative Patent Judge

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